Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

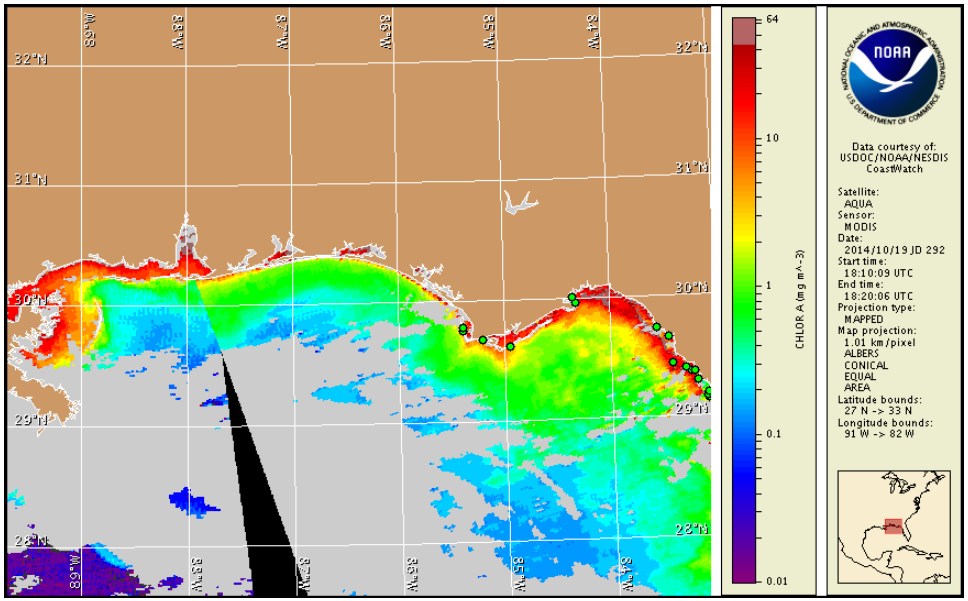
Monday, 20 October 2014

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, October 16, 2014



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from October 12 to 16: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide: http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information for Florida can be obtained through FWC Fish and Wildlife Research Institute at: http://myfwc.com/redtidestatus

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: http://tidesandcurrents.noaa.gov/hab/bulletins.html

Conditions Report

Not present to very low concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of northwest and southwest Florida from Franklin to Charlotte counties. No respiratory irritation is expected alongshore northwest Florida Monday, October 20 through Thursday, October 23.

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Visit http://tidesandcurrents.noaa.gov/hab/#swfl for the most recent southwest Florida conditions report.

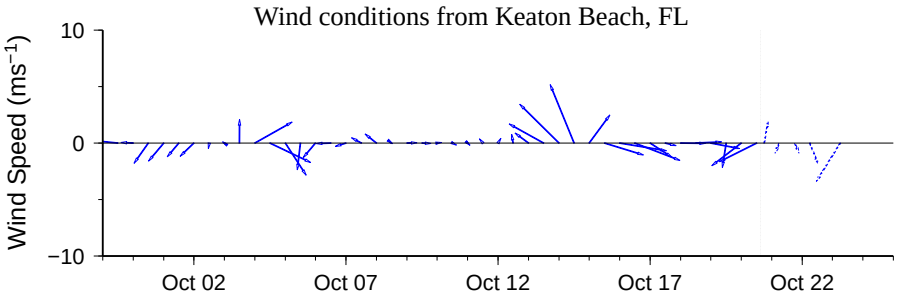
Analysis

Not present to very low concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of northwest and southwest Florida from Franklin to Charlotte counties. Sampling over the past week alongshore and in the bay regions of Gulf, Franklin, and Wakulla counties all indicated *K. brevis* is not present (FWRI; 10/15). *K. brevis* concentrations have not been detected along- or offshore northwest Florida (Escambia to Taylor counties) since sampling on 10/9 detected 'very low a' concentrations of *K. brevis* in Frankling County on the gulf side of St. George Island State Park (FWRI). No respiratory irritation associated with *K. brevis* has been reported along the coast of northwest Florida (MML; 10/16-10/20). No reports of dead fish have been received from alongshore northwest Florida since the last report of a fish kill in Franklin County on 10/16 (MML; 10/16-10/20).

In MODIS Aqua imagery from 10/19 (shown left), patches of elevated to very high chlorophyll (2 to >20 μg/L) are visible along- and offshore northwest Florida from Gulf to Taylor counties. Anomalously high chlorophyll continues to be visible, in patches, alongshore and extending up to 45 miles offshore northwest Florida from Franklin to Taylor counties. Due to the optical characteristics that are typical in the area, elevated chlorophyll is not necessarily indicative of the presence of *K. brevis*, and some elevated chlorophyll may also be due to the resuspension of benthic chlorophyll and sediments along the coast.

Variable winds over the past several days may have minimized the transport of *K. brevis* concentrations. North to northeast winds forecasted tonight through Thursday may promote westerly transport of *K. brevis* concentrations.

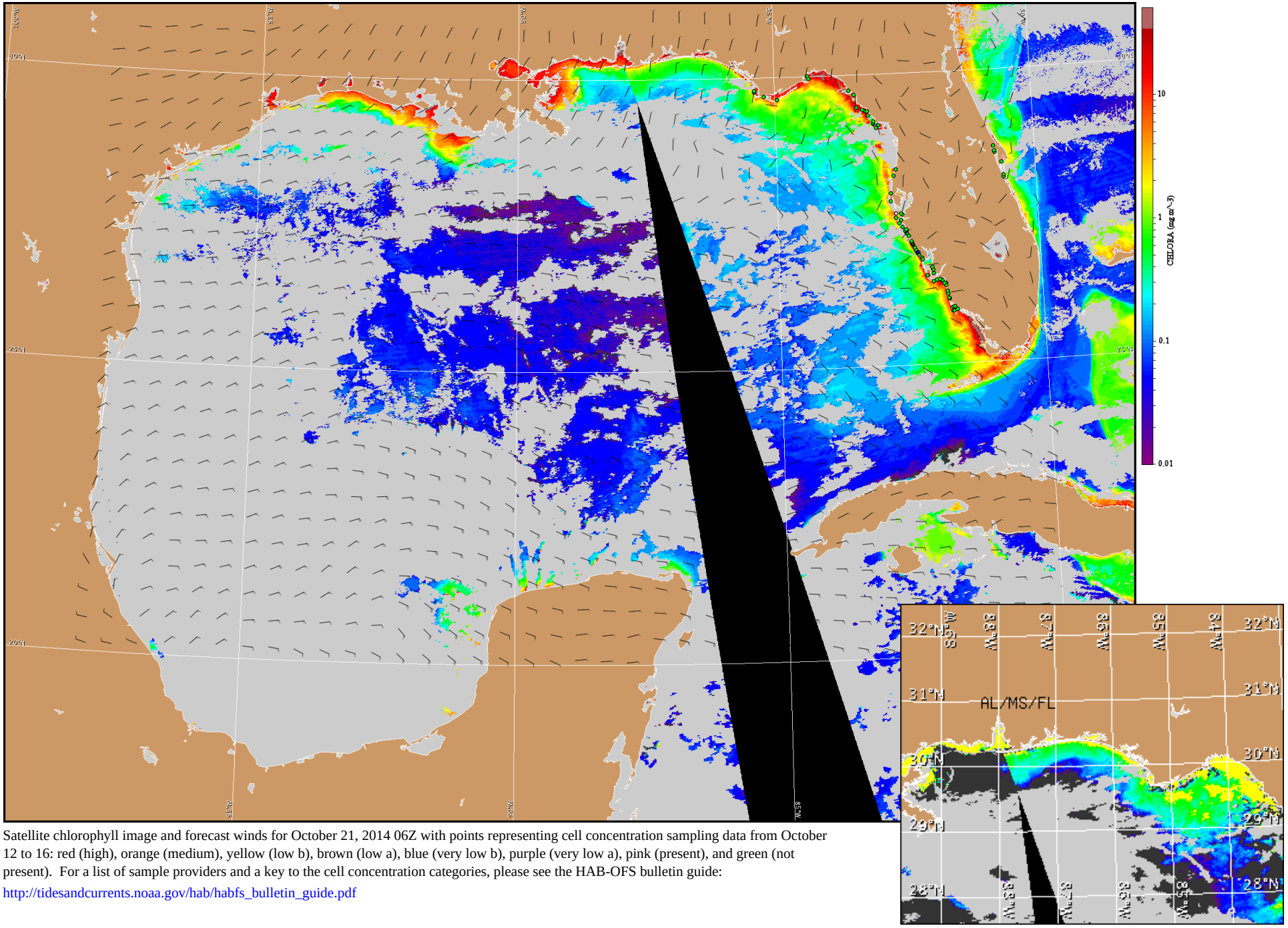
Davis, Urízar



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

Wind Analysis

Escambia to Taylor counties: Southeast winds (10kn, 5m/s) today becoming north winds (5-15kn, 3-8m/s) tonight through Tuesday. Northeast winds (5-15kn) Wednesday and Thursday.



Satellite chlorophyll image and forecast winds for October 21, 2014 06Z with points representing cell concentration sampling data from October 12 to 16: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide: http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).